

**GUIDELINE D-3**  
**(formerly 07-06)**

**Environmental Considerations for Gas or Oil Pipelines and  
Facilities**

**Legislative Authority:**

*Environmental Protection Act, RSO 1990, Sections  
5,14,27,46, and 91-123*  
*O. Regulation 347, General -- Waste Management*  
*O. Regulation 346, General -- Air Pollution*  
*Ontario Water Resources Act, RSO 1990,*  
*Sections 30(1)(2), 34(3)(c), 34(4), and 53(1)*  
*Pesticides Act, RSO 1990, Sections 7,27 and 28*  
*Environmental Assessment Act, RSO 1990 Section 3*

**Responsible Director:**

Director, Environmental Planning Branch

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**SYNOPSIS**

This guideline identifies the environmental interests of the Ministry in proposals for new, expanded or upgraded gas or oil pipelines and facilities in Ontario, which proponents have submitted to the Ontario Energy Board (OEB) and/or the National Energy Board (NEB) for approval. It outlines the environmental considerations that the Ministry advises the OEB and/or the NEB to take into account when they give approval to gas or oil pipelines and facilities under their jurisdiction.

All gas or oil pipelines and facilities which do not require approval by the OEB or NEB are subject to applicable provincial legislation and regulations, including appropriate approval requirements. This guideline informs proponents of the requirements that the Ministry may require them to meet in this connection.

This document also provides guidance to Ministry staff commenting on pipeline proposals being reviewed under the OEB and/or NEB, or proposals which pipeline companies or others have submitted directly to the Ministry for review. It also sets the context for all existing and new guidelines and procedures related to gas and oil pipelines. The intent is to achieve a reasonable degree of protection for the environment by ensuring that proponents incorporate the necessary safeguards early in planning, and then implement them during construction and operation of these facilities. This guideline should be used in conjunction with the "Environmental Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario" (OEB 1989, as amended).

The Environmental Planning Branch and Ministry Regional Offices will implement this guideline in the course of preparing and co-ordinating comments on gas and oil pipeline proposals.

**1.0 Introduction**

The objectives of the guideline are to:

- a) minimize any potentially significant, adverse environmental effects from the construction and operation of proposed oil or gas pipelines and facilities;
- b) ensure appropriate environmental considerations are taken into account at an early stage in their planning and then implemented; and

- c) identify the legislation and approvals which may apply to activities associated with oil or gas pipelines and facilities

## **2.0 Definitions**

### **Compressor Station:**

Usually consists of a reciprocating or turbine type compressor powered by an electric, internal combustion or jet turbine engine which maintains the desired operating pressure within the pipeline system and moves the gas or oil

### **Dewatering:**

The removal of impounded water or groundwater from the construction area during trenching

### **Facilities:**

Stations (e.g., valve, compressor and metering) which move, store, regulate and meter the natural gas or oil, and includes underground storage pools for storing large inventories of gas

### **Hydrostatic Testing:**

A procedure undertaken to test the engineering integrity of the pipeline by pumping water in at high pressure for a specified period of time to identify any leaks prior to putting the pipeline in service

### **Sediment:**

Solid or soil-like material at the bottom of a watercourse or waterbody

## **3.0 Application of the Guideline**

The guideline applies to all proposals for new, expanded or upgraded oil or gas pipelines and facilities in Ontario. It shall apply to all aspects of new or expanded pipelines and facilities, including their planning, design, construction, operation, maintenance and removal. The scope of the guideline includes all gas or oil pipeline-related activities, reviewed by the Ministry, for which Ministry advice is invited. Such requests are made primarily by pipeline companies, and most of these requests for review involve an application by the pipeline company to the Ontario Energy Board (OEB) and/or the National Energy Board (NEB).

### **3.1 Considerations within Direct Interest of the Ministry**

#### **Water Quality/Quantity:**

Surface and groundwater quality and quantity, including water in lakes, rivers, streams, wetlands and in the subsurface, as related

to such activities as water crossings, blasting, dewatering, and hydrostatic testing of pipelines (and as it relates to permits to take water, diversions, and discharge treatment requirements).

#### **Erosion and Sedimentation:**

Erosion and sedimentation controls and other practices for managing surface runoff and water crossings, to prevent entry of contaminants into water bodies, including proper discharge of hydrostatic test water and proper siting and disposal of excess fill and excavated material.

#### **Sewage and Water Systems:**

Sewage treatment and water supply systems, including individual sewage system interference and individual water well interference.

#### **Waste Management:**

Management of waste materials, including those from construction (e.g., excess oil and fuel), excavation (e.g., contaminated sediments/soils, non-operating and/or operating landfills) and operation.

#### **Sediment and Soil Contamination:**

Sediment and soil contamination, including potential sources, proper containment, clean-up and disposal of contaminants.

#### **Air Quality:**

Air quality management, including the control of odour, dust and other contaminants during construction, operation (e.g., compressor stations) and contingency activities.

#### **Noise and Vibration:**

Noise and vibration during construction including blasting and during operation of facilities (e.g., compressor stations).

#### **Land Use:**

Incompatible or conflicting land uses which affect or are affected by pipeline proposals (these include: operating or non-operating landfill sites; existing or closed industrial sites both on or adjacent to the right-of-way and/or upstream of a watercrossing; and residences which might suffer adverse impact from noise and/or interference with water wells.

#### ***Environmental Assessment Act:***

Undertakings subject to the *Environmental Assessment Act*, (e.g., proposed landfills) which affect or are affected by pipeline proposals, or gas/ oil pipelines that are specifically designated

under the *Environmental Assessment Act*.

#### **Environmental Approvals:**

Compliance with any conditions in an approval, licence or permit issued under the *Environmental Protection Act*, the *Ontario Water Resources Act*, the *Pesticides Act* or the *Environmental Assessment Act* (See Section 5.0).

#### **Energy Matters:**

Energy rationale for oil or gas pipelines and facilities.

#### **Other Considerations:**

Any other matters, including public participation, that specifically relate to the above areas directly within the Ministry's mandate.

### **4.0 Guideline Implementation**

#### **4.1 Implementation**

The Director of the Environmental Planning Branch and Regional Directors of the Ministry shall implement this guideline as it relates to environmental considerations. Matters relating to energy will be implemented by the Director of the Energy Liaison and Planning Branch.

#### **4.2 Ministry Staff Involvement**

Ministry staff activities, in most cases, shall be co-ordinated through the Ministry's environment representative on the Ontario Pipeline Coordination Committee (OPCC) of the OEB. Matters relating to energy shall be co-ordinated by the Ministry's energy representative on the OPCC. Ministry staff involvement includes:

#### **Project Review:**

Review of environmental reports including route selection, preferred route analyses and assessments and, where necessary, reviews of proposed contract drawings and specifications, work schedules and the contractor's proposed method of construction.

#### **Monitoring:**

Periodic inspection and surveillance of ongoing pipeline construction, to ensure necessary compliance and review of monitoring reports.

#### **Public Hearings:**

Intervention and/or participation, as appropriate, at any hearings

before the OEB or NEB on pipeline applications or related matters of concern to the Ministry.

#### **Other Activities:**

Any other activities that may be necessary to ensure compliance with the intent of any approval conditions or the Ministry's environmental objectives.

#### **4.3 Application of other Ministry Guidelines**

Any related Ministry guidelines, procedures and studies may be used to guide the OEB, NEB and the pipeline industry during the process of approving and implementing pipelines and facilities in Ontario. In the absence of such guidelines, procedures and studies, staff shall use best professional judgement and available information.

#### **4.4 Ontario and National Energy Board approvals**

The Ministry may suggest, through the OPCC, that the OEB attach conditions, where appropriate, in the Board Order, in the event of an approval of a pipeline application, to ensure that Ministry concerns are met. In those cases where proponents are applying to the NEB for approval of a proposed pipeline, and where the proposal is not directly within Provincial jurisdiction, the Ministry may ask, through the OPCC, that the NEB attach conditions in the Board Order, where appropriate, in the event of an approval, to ensure that Ministry concerns are met.

#### **5.0 Legislative Provisions**

##### ***Environmental Protection Act, RSO 1990***

**Section 14:** establishes general prohibition against creation of "adverse effects"

**Section 27:** prohibits alteration of a waste disposal site without a Certificate of Approval (CofA)

**Section 46:** requires approval for use (e.g., right-of-way) of any landfill which has been non-operational for 25 years or less

**Section 91-123:** establishes notification and cleanup requirements and liability for discharges related to spills

**O.Reg. 347:** regulates waste management

**O.Reg. 346:** regulates atmospheric emissions. Requires a CofA (Air) for construction, alteration, extension or replacement of any plan, structure, equipment, etc., that may result in atmospheric emission of contaminants or altered rate of emission. Contaminants include: gas, particulate, odour, heat, sound, vibration, etc.

##### ***Ontario Water Resources Act, RSO 1990***

**Section 30(1):** prohibits discharge of polluting material

**Section 30(2):** requires notification to Minister when polluting material is discharged or escapes into waterbody

**Section 33(1):** areas defined for protection of public water supply

**Section 34(3)(c):** requires a permit for the diversion or storage of

water in excess of 50,000 litres per day

**Section 34(4):** requires a permit when water taking interferes with any public or private interest in any water

**Section 53(1):** requires approval of industrial sewage works. The approval is required for the establishment, alteration, extension or replacement of new or existing sewage works. As defined in Section 1, "sewage works" means any works for the collection, transmission, treatment and disposal of sewage, or any part of any such works and "sewage" includes drainage, stormwater, commercial wastes and industrial wastes

***Pesticides Act, RSO 1990***

**Section 7:** requires a permit before using a pesticide

**Section 27, 28:** provides for Stop Orders and Control Orders

***Environmental Assessment Act, RSO 1990***

**Section 3:** requires environmental assessment of undertakings by public bodies. This can affect pipelines on land or easements owned by public bodies (e.g., Ontario Hydro)

**6.0 References**

"Environmental Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario" (Ontario Energy Board, 1989, as amended)